

# Work Order ID 121426

Thursday, June 26, 2014 2:59:23 PM

**\*121426\***

Page 1

Item ID: D4805-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: 20 Stop **\*NS2\***  
 Item Name: End Fitting  
 Start Date: 6/26/14 Start Qty: 24.00 **\*24\*** Cust Item ID:  
 Required Date: 6/26/14 Req'd Qty: 24.00 **\*24\*** Customer:  
 Reference:

Approvals: Process Plan: MLS Date: 14-06-27 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4805	REV A

100 0.00

**\*100\***

Outsource5

Memo

0.00

Outsource process - Machining

ISSUE P/O: 24906  
 POSSIBLE SUPPLIER: ATG

C OF C IS REQUIRED

CL 14/07/08 20

110

QC6- Inspect dimensions to drawing

0.00

**\*110\***

QC

Memo

0.00

Quality Control

(20)

DAC  
38  
98  
DEC 16 2014

150

PURCHASING

0.00

**\*150\***

Purchasing

Memo

0.00

Purchasing

Issue P/O: 24906  
 LPI Per ASTM 1417 LEVEL 2  
 Certificate of conformaty is required

done @ ATG

CL 14/07/08

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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# Work Order ID 121426

Thursday, June 26, 2014 2:59:23 PM

**\*121426\***

Page 2

Item ID: D4805-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: End Fitting

Stop **\*NS2\***

Start Date: 6/26/14

Start Qty: 24.00

**\*24\***

Cust Item ID:

Required Date: 6/26/14

Req'd Qty: 24.00

**\*24\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

Receive & Inspect for Damage & Mat'l Certs

0.00

**\*160\***

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

20x SQ 14-12-16

190

QC21- Final Inspection - Work Order Release

0.00

**\*190\***

QC

Memo

0.00

Quality Control

5/129

20 DEC 17 2014

DAS  
06  
9-89

14/12/18

14-12-18

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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### FAULT CATEGORY

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# Picklist Print

July-31-14 11:21:52 AM

Page 1

Work Order ID: 121426

**\*121426\***

Parent Item: D4805-1

**\*D4805-1\***

Parent Item Name: End Fitting

Start Date: 6/26/14

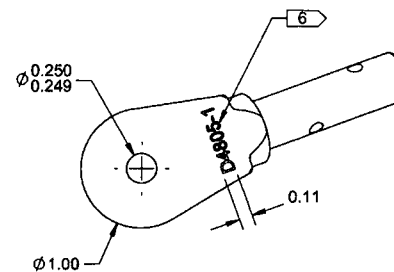
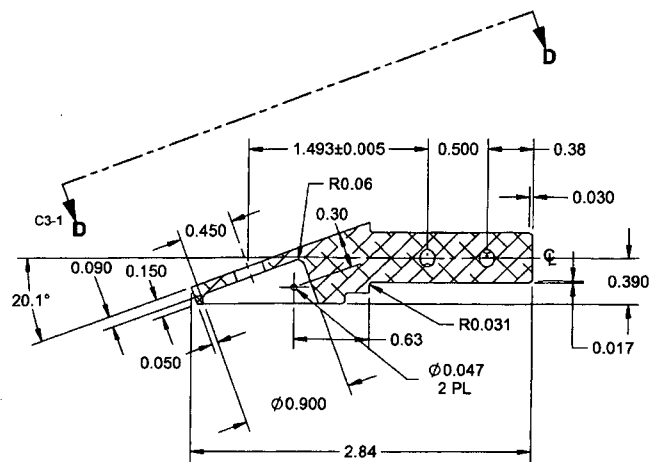
Required Date: 6/26/14

Start Qty: 20.00

Required Qty: 20.00

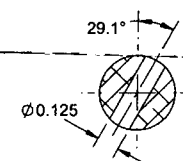
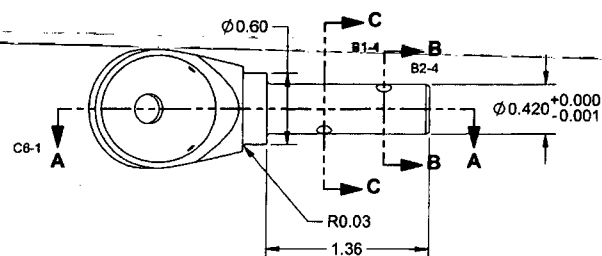
Comments: IPP REV:A NEW ISSUE JLM 14-01-28 VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4805-1P		Purchased	No				Each	0.0000		20			
<b>*D4805-1P*</b>										<b>**</b>	<u>20 x 8p14-12-18</u>		
End Fitting													
M174PH-H900R1.375		Purchased	No				f	15.6000		8			
<b>*M174PH-H900R1 375*</b>										<b>**</b>	<u>C214/07/03</u>		
17-4 SS H900 ROUND BAR 1.375													
				<u>Location</u>			<u>Loc Qty</u>			<u>Loc Code</u>			
				MAT031			15.6						
				m126952			15.6				<u>8</u>		

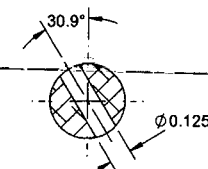


SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

NO. 121426 MJS  
14-06-27



SECTION B-B B5-1



SECTION C-C B6-1

# **D4805-1 END FITTING**

## **NOTES:**

- 1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION  
PER AMS 5643/ASTM A564  
DART SPEC M17-4-R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.  
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
- 7) WEIGHT: 0.13 lbs
- 8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

APPROVED	A NEW ISSUE		RF	13.09.16
	REV.	DESCRIPTION	BY	DATE
	DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
	DRAWN	RF		
	CHECKED	HS	DRAWING NO.	REV. A
	MFG. APPR.	JLM	<b>D4805</b>	SHEET 1 OF 3
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	<b>END FITTING</b>	NTS
	DATE	13.12.16	<small>COPYRIGHT © 2013 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO24906

Purchase Order Date 7/8/2014

PO Print Date 8/20/2014

Page Number 4 of 8

**Order From :**

VC-ATG001

A.T.G. INDUSTRIES INC.  
731 INDUSTRIELLE ROAD  
ROCKLAND, ON K4K 1T2  
CANADA

**Ship To :** DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 613-446-4544

**Ship To Contact**

**Ship To Phone**

**Ship Via:** VENDOR'S TRUCK

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #** 10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

**Line Total:** \$1,140.00

7 D4805-1P

End Fitting

12/19/2014 FN

20.00

\$138.50

\$2,740.00

Yes

Each

12/19/2014

AS PER DWG D4805-1 REV. A  
B121426

8/14/12 L6

**Line Total:** \$2,770.00

10 D4920-1P

End Fitting

12/19/2014 FN

12.00

\$164.00

\$1,968.00

Yes

Each

12/19/2014

AS PER DWG D4920-1 REV. A  
B121394  
MAT: 174PH-H900R 1.5" M128809

**Line Total:** \$1,968.00

11 D4884-3P

End Fitting, Eye

12/19/2014 FN

16.00

\$122.50

\$1,960.00

Yes

Each

12/19/2014

AS PER DWG D4884-3 REV. A  
B121463  
MAT: 174PH-H900R 1.5" M128809

**Note:**

8/20/2014



A.T.G. INDUSTRIES INC.  
731 INDUSTRIELLE STREET  
ROCKLAND, ON K4K 1T2  
Canada

Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 909316

Date: 16-Dec-14

To

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
Canada

Ship To


CHANTAL LAVOIE  
DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
Canada

Ph. 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
ea	END FITTING Job: 16639	PO: PO24906	Line: 4
20 ea	Part: D4805-1P END FITTING Job: 16644	Rev: A PO: PO24906	Line: 9
DATE: 16/12/2014			
CERTIFIED SIGNATURE: 			
RECEIVER SIGNATURE: _____			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
CERTIFICATE OF CONFORMANCE			
A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO THE REQUIREMENTS.			
MADE IN CANADA.			

SP 14-12-16.





# F.A.I.

## First Article Inspection Report

#

529

Requesting Company: Dart Aerospace

PO#: PO24906

Line: 9

Qty: 20

Part Number: D4805-1P

Rev: A

Part Description: End Fitting

FAI Supplied by: A.T.G. Industries Inc.

FAI Prepared by: Emily Louis-Seize

Date: July 14, 2014

Qty Inspected:

FAI Inspected by: Mike Csontos

Date: December 4, 2014

### Material and/or Special Processes

Type	Description	Specification Number/Code	Certificate of Conformance Number:
Material	17-4SS H900		Supplied by Customer
Special Process	Liquid Penetrant	QSI 038 6.1.1 (ASTM E1417 Level 2)	PO#: 20140501

### Inspection Information and Results

Char#	Location	Requirement	Result	UoM	Pass/Fail	Measurement Equipment:	Operation #:
1	D6	1.493±.005	1.495	inch	Pass	Height Gauge	3
2	D6	R.06	R.06	inch	Pass	Radius Gauge	2
3	D6	.30	.305	inch	Pass	Height Gauge	2
4	D6	.500	.500	inch	Pass	Height Gauge	3
5	D5	.38	.378	inch	Pass	Height Gauge	3
6	D5	.030	.029	inch	Pass	Comparator	1
7	C5	.390	.392	inch	Pass	Height Gauge	2
8	C5	.017	.016	inch	Pass	Comparator	1
9	C6	R.031	R.03	inch	Pass	Radius Gauge	1
10	C6	.63	.625	inch	Pass	Height Gauge	2
11	C6	Ø.047	Ø.050	inch	Pass	Gauge Pin	2
12	C6	2.84	2.839	inch	Pass	Height Gauge	2

# Inspection Information and Results

Char#	Location	Requirement	Result	UoM	Pass/Fail	Measurement Equipment:	Operation #:
13	C7	Ø.900	Ø.893	inch	Pass	Vernier Caliper	2
14	C7	.050	.050	inch	Pass	Micrometer	2
15	C7	20.1°	20.1°	degree	Pass	Comparator	2
16	C7	.090	.086	inch	Pass	Micrometer	2
17	C7	.150	.150	inch	Pass	Comparator	2
18	D7	.450	.450	inch	Pass	Micrometer	2
19	D4	Ø.250/.249	Ø.2495	inch	Pass	Gauge Pin	2
20	D3	Note 6	D4805-1	n/a	Pass	Visual	2
21	C4	.11	.125	inch	Pass	Vernier Caliper	2
22	C4	Ø1.00	Ø.999	inch	Pass	Vernier Caliper	2
23	B6	Ø.60	Ø.60	inch	Pass	Vernier Caliper	1
24	B5	Ø.420+.000/-.001	Ø.4197	inch	Pass	Micrometer	1
25	B6	1.36	1.36	inch	Pass	Height Gauge	1
26	B6	R.03	R.03	inch	Pass	Radius Gauge	1
27	B4	Ø.60 REF	Ø.599	inch	Pass	Vernier Caliper	1
28	B5	Ø.75	Ø.750	inch	Pass	Comparator	1
29	B3	29.1°	29.1°	degree	Pass	Comparator	3
30	B3	Ø.125	Ø.125	inch	Pass	Gauge Pin	3
31	B2	30.9°	30.9	degree	Pass	Comparator	3
32	B1	Ø.125	Ø.125	inch	Pass	Gauge Pin	3

First Article Inspection Report Approved and  
Completed in Full by:

*M. Croft*

Date: 15/12/14



# skyservice Work Order Traveler



Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO23016	Customer: ATG Industries Inc	Dept: NDT YUL	Reference: 20140501
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 5

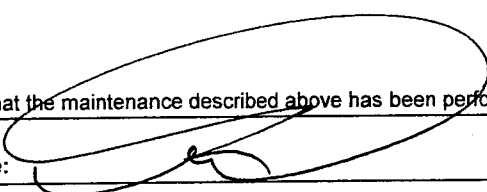

## Work Required:

CARRY OUT NDT ON 20 END FITTING P/N:D4805-1P' AS PER PO: 20140501

Action Taken:				Date:		Initial/Stamp:	
LPI C/O IAW ASTM E-1417M-13  ***NO CRACK FOUND***  PEN.(ZL-37 , B#10A070), DEV.(SKD-S2,B#13D14k) , EMU.(ZR-10B,B#10A074).				DEC 10 2014		 	
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

# COPY

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp	Date:
Name: <b>RAFIK MELIKIAN</b>		DEC 10 2014